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Ce plan d'action pour réformer l'enseignement professionnel au secondaire réalise l'engagement pris par le ministre de l'Education au début de l'année 1986, et devrait entrer en vigueur en septembre 1987. Il a comme objectifs d'assurer une solide éducation générale, de voir à ce que les étudiants n'aient pas à faire un choix de carrière prématuré, de fournir un entraînement plus complet et plus pratique, de revoir les actuels profils de formation, de clarifier les critères d'évaluation finale. Le document est divisé en quatre parties: 1. la structure organisationnelle de l'enseignement professionnel; 2. l'infrastructure pédagogique de l'enseignement professionnel; 3. la coordination de l'enseignement professionnel avec l'industrie, l'éducation des adultes, le collégial et les institutions privées; 4. le secteur d'enseignement général contenant de l'enseignement technique. Un calendrier d'application de la réforme est contenu dans le document.

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VOCATIONAL EDUCATION IN SECONDARY SCHOOL

PLAN OF ACTION

Québec

EDUQ 8770458

VOCATIONAL EDUCATION IN SECONDARY SCHOOL

PLAN OF ACTION

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Ministère de l'Éducation

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At the beginning of 1986, I announced my intention to finalize, prior to the end of this school year, a plan for the reform of vocational education at the secondary school level. It is my pleasure at this time to submit the plan for final consultation.

This long-awaited plan has been in the making since 1979. The reform of education in Québec that was undertaken at that time led, in 1982, to the proposals contained in the document entitled *Vocational Education for Young People*. This document generated much reflection and discussion; a number of principles emerged and gained widespread support. However, while several new ways of organizing vocational education were put forward, none of these reached the implementation stage. A review of the whole question of vocational education has led to the clear conclusions presented in this plan of action, which should be adopted without further delay.

The goals are clear: to ensure a sound general education as a basis for vocational education; to ensure that students do not have to make premature decisions concerning their choice of career; to adapt vocational education to give young people more comprehensive and practical training in preparation for entering the work force; to revise the present vocational education profiles, which are poorly defined and often considered to be little more than convenient options for students with learning difficulties; and finally, to clarify the criteria for recognition of achievement.

In essence, the proposed new means of attaining these objectives take the form of two new vocational education branches which have clearly defined admission requirements.

The education offered in the first branch prepares students for highly skilled trades, and is open to students who have obtained a secondary school diploma, or to students seventeen years of age who have successfully completed Secondary IV courses in mother tongue, second language, mathematics, and religious and moral education or moral instruction.

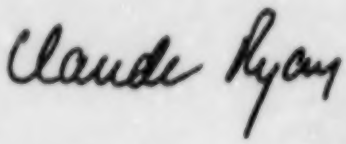
The education offered in the second involves the development of manual skills rather than the acquisition of theoretical knowledge. This branch is open to students seventeen years of age who have successfully completed Secondary III courses in mother tongue, second language, and mathematics.

The first branch leads to a secondary school vocational diploma and the second, to a secondary school vocational certificate.

For students who are unable to follow the regular paths in general or vocational education, individualized paths for learning will be provided, since the short vocational profiles will no longer be available to them. These individualized paths will be characterized by changes in school organization, a flexible division and distribution of teaching time, and the use of teaching approaches which will enable students to acquire the broadest possible basic general education and which will help them to become independent and productive members of society.

The plan also suggests several guidelines for solving problems which have not to date been given sufficient consideration. These guidelines address the need for the rational distribution of vocational programs throughout Québec, the need to strengthen the ties between industry and the educational community, the need to coordinate vocational education at the secondary school and CEGEP levels, as well as the need to coordinate vocational education for young people and adult education.

All of these elements have been incorporated in an integrated plan. It is important that they be validated one more time before they are adopted and implemented. This final phase, validation, must necessarily be brief. It completes a long and meticulous development process. Time is short. We must therefore act quickly to ensure that the start of the 1987 school year marks the new beginning so urgently needed in vocational education. I request the cooperation of each and every one of you so that the long-awaited measures may be finalized within the available time.



Claude Ryan
Minister of Education

CHAPTER 1

Organizational framework for vocational education

The new organizational framework proposed for vocational education establishes in general terms how vocational education will be organized and how vocational studies will be certified. It is part of the effort to upgrade vocational education by suggesting an in-depth restructuring of its organization. Once the new proposals have been accepted, they will be specified in the *Regulation Respecting the Basis of Vocational Education Organization* and in the annual *Instruction sur l'organisation des activités éducatives*. To clarify the new organizational framework, the principles on which it is based are described in some detail below.

1.1 The Underlying Principles of the Organizational Framework for Vocational Education

a) A Sound Basic Education

Following the example of other industrialized societies, Québec should make every effort to ensure that all of its young people receive the sound basic education they require if they are to develop their potential individually and as members of their society.

For this reason, vocational education ideally should not begin before students have finished their secondary school studies and have obtained their secondary school diploma.

b) Flexible and Realistic Admission Requirements

While a secondary school diploma as a requirement for entry into a vocational education program[1] should be the ultimate goal, there is no doubt that such a requirement would constitute an almost insurmountable barrier for many students. This requirement would tend to encourage them to drop out of the school system without a diploma or other qualification, thus committing them to a future that, socially and economically, is both costly and unacceptable.

In light of this, it would appear that admission requirements should be flexible. For students who are over the age of compulsory school attendance, the academic prerequisites should be limited to those which are needed to achieve the objectives of the vocational programs.

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1 Throughout this document the word program is understood to comprise specific programs of study and the related curriculum guides, organizational guides, and evaluation guides.

c) Sound Vocational Education Built on a Basic General Education

Students' vocational education should be based on a general education that is sufficiently comprehensive to give them the job mobility which all young people need when they enter the job market. Their basic general education (see Section 1.2.2d) should also be broad enough to ensure that they will be able to achieve the objectives of their chosen vocational programs. The adaptation of vocational programs to meet current standards in the workplace has significantly raised the level and increased the quantity of program content and thus, makes it necessary to have strict basic general education prerequisites for entering vocational education.

d) Specific Recognition of Achievement in Vocational Education

To avoid any confusion and to clearly identify the particular vocational level reached by students, the Ministère should differentiate, in its certification practices, the levels attained by students who have successfully completed programs in vocational education.

e) An Organizational Framework Which Promotes Open-Ended Vocational Education

The organization of vocational education should encourage students to pursue higher levels of education by identifying "bridges" or "links" which will enable them, if they wish, to complete their basic general education and obtain a secondary school diploma or to continue their vocational studies.

The proposed organizational framework is based not only on the above principles, which reflect the ideas agreed upon and the concerns voiced during the consultations held in the past two years, but also to a great extent on some of the main orientations in the *Regulation Respecting the Basis of Secondary School Organization* issued in 1981. The organizational framework thus favours raising the level of basic general education, postponing the moment when students must make career choices, establishing specific certification of vocational studies, and encouraging students to obtain a secondary school diploma while not making this an essential requirement for obtaining a secondary school vocational diploma.

The new organizational framework includes elements similar to those found in vocational education in most other industrialized societies. The new organizational framework introduces a variety of vocational education programs of study distinguished in terms of the different types of skills required (see the two "branches" described in Section 1.2) and the ways in which they are organized, to ensure that the needs and abilities of students as well as the needs and expectations of the work place will be taken into account. The framework will

correspond more closely to the current view of the structure of the labour market.

The framework also introduces the concept of admission requirements for vocational education based on achievements in general education and the age of the student. The admission age of seventeen would appear to be realistic because it prevents students from making premature career choices and encourages them to work towards the broadest possible basic general education. It also gives them time to acquire the necessary maturity to undertake vocational studies and to reach the minimal age required by most employers for entry into the job market.

1.2 Description of the Organizational Framework

The organizational framework for vocational education envisages two distinct branches, the first leading to a secondary school vocational diploma and the second leading to a secondary school vocational certificate. Each of these branches covers a variety of specific occupations with different basic general education requirements, thinking skills and a variety of other skills. Programs leading to a secondary school vocational diploma require a higher level of qualifications, as for example, programs preparing students to be a wildlife officer, professional chef, office specialist, hairdresser, or industrial maintenance electrician. The programs leading to a secondary school vocational certificate involve learning based more on the development of manual skills than on the acquisition of theoretical knowledge, for example, programs preparing students to be a bricklayer, shoemaker, plasterer, housepainter, short-order cook, or gardener's helper.

1.2.1 Description of the Branch Leading to a Secondary School Vocational Diploma

a) Nature and Purpose

The education offered in this branch is built on a broad basic general education, prepares students for highly skilled trades, and leads to better employment opportunities and greater job mobility.

b) Admission Requirements

Candidates must have a secondary school diploma.

or

They must be seventeen years of age and have obtained Secondary IV credits in mother tongue, second language, mathematics, and Catholic or Protestant religious and moral education or moral instruction.
For some programs, candidates must have specific prerequisites in general education.

c) Proposed Time

Students will take 36 to 72 credits depending upon the program specialization chosen. In a regular school year, students can acquire 36 credits, which is the equivalent of 900 hours of learning activities.

d) Instructional Organization

Students in this branch take only vocational education programs of study.

e) Certification of Studies

Upon successful completion of the vocational programs of study, students will receive, from the Minister of Education, a secondary school vocational diploma with their program specialization noted.

1.2.2 Description of the Branch Leading to a Secondary School Vocational Certificate

a) Nature and Purpose

The education offered in this branch is designed to enable students to practice a trade and involves the development of manual skills rather than the acquisition of theoretical knowledge.

b) Admission Requirements

Candidates must be seventeen years of age and have obtained Secondary III credits in mother tongue, second language, and mathematics.

c) Proposed Time

Programs in this branch are two years in length.

d) Instructional Organization

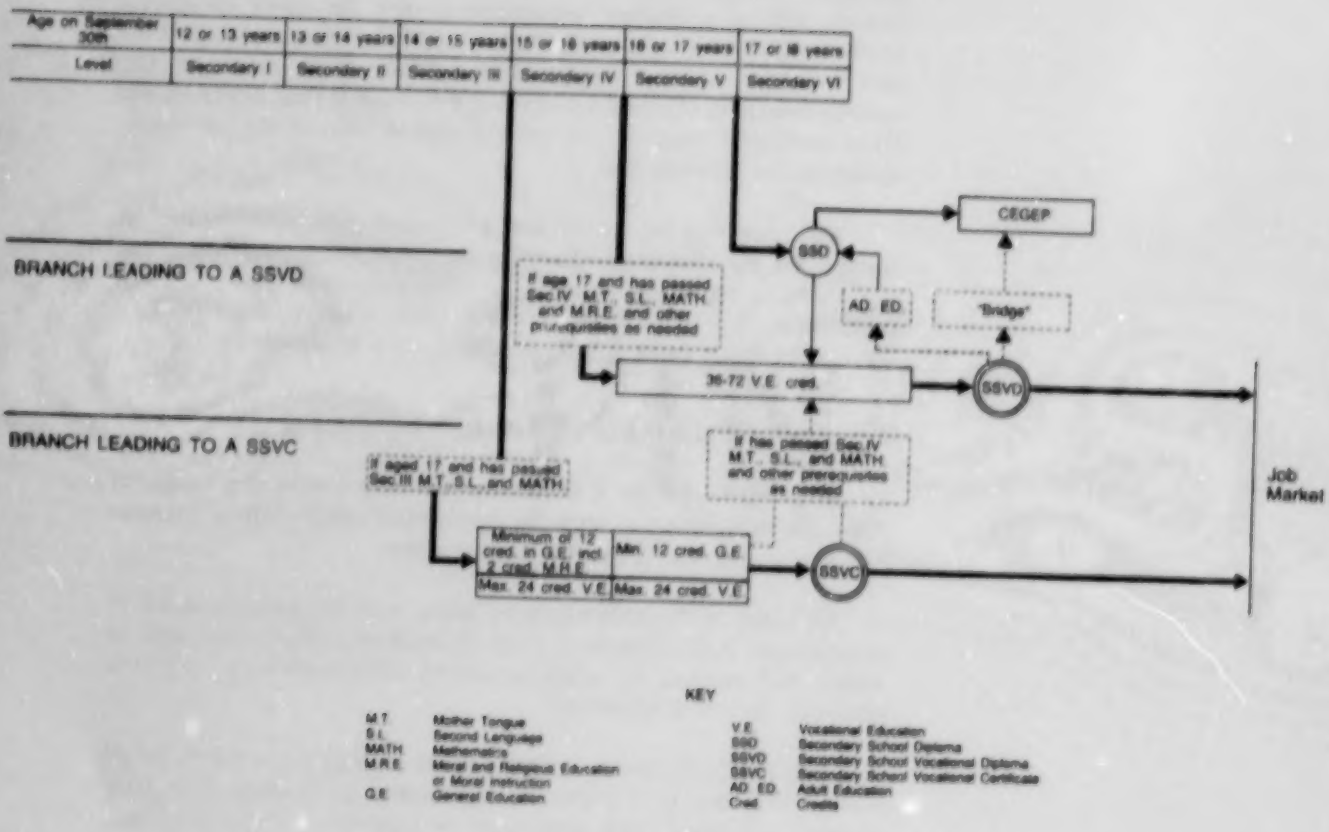
In each year of this two-year period, students may take up to a maximum of 24 credits in vocational education and must take a minimum of 12 credits in basic general education subjects (mother tongue, second language, and mathematics). During the first year, they must take a two-credit course in Catholic or Protestant moral and religious education or moral instruction.

e) Certification of Studies

Upon successful completion of the vocational programs of study, students will receive, from the Minister of Education, a secondary school vocational certificate with their program specialization noted.

The following table illustrates the two proposed vocational education branches.

The proposed vocational education branches


Age on September 30th
12 or 13 years
13 or 14 years
14 or 15 years
15 or 16 years
16 or 17 years
17 or 18 years
Level
Secondary I
Secondary II
Secondary III
Secondary IV
Secondary V
Secondary VI
CEGEP
BRANCH LEADING TO A SSVD
SSD
If age 17 and has passed Sec.IV M.T., S.L., MATH and M.R.E. and other prerequisites as needed
AD. ED.
"Bridge"
35-72 V.E. cred.
SSVD
BRANCH LEADING TO A SSVC
If has passed Sec.IV M.T., S.L., and MATH and other prerequisites as needed
If aged 17 and has passed Sec.III M.T., S.L., and MATH
Job Market
Minimum of 12 cred. in G.E. incl. 2 cred. M.R.E.
Min. 12 cred. G.E.
Max. 24 cred. V.E.
Max. 24 cred. V.E.
SSVC

KEY

M.T.	Mother Tongue	V.E.	Vocational Education
S.L.	Second Language	SSD	Secondary School Diploma
MATH	Mathematics	SSVD	Secondary School Vocational Diploma
M.R.E.	Moral and Religious Education or Moral Instruction	SSVC	Secondary School Vocational Certificate
G.E.	General Education	AD. ED.	Adult Education
		Cred.	Credits

The organizational framework for students working towards a secondary school vocational certificate is not simply a revised version of the present short vocational profiles. The new organization is significantly different. The admission requirements for the secondary school vocational certificate branch involve higher academic requirements than those set for the short vocational profiles. The secondary school vocational certificate branch offers students training for real jobs that are different from those for which training is offered in the diploma branch; this is a distinct improvement over the short vocational profiles, which only offer students parts of the long vocational profiles and therefore do not prepare them adequately to carry out the specific functions of a real job. In fact, the result is that several of the short vocational programs of study presently offered do not correspond to any existing jobs.

Within the context of the proposed new organizational framework, the raising of admission standards will result in some of the students presently enrolled in short vocational profiles being transferred to a new organizational context better adapted to their particular needs, namely, individualized paths for learning.

1.3 Individualized Paths for Learning

The individualized paths for learning represent a type of educational organization designed to meet the educational needs of those students who are unable to follow the regular paths.

The aim of the individualized paths is to broaden as much as possible the basic education given to students between the ages of twelve and sixteen, by adapting school organization and teaching practices, and time allotments.

At the age of sixteen, students are no longer required to attend school. This fact is of particular significance to students who have learning difficulties, lack motivation, or experience repeated failure, and who see no hope of being able to integrate into a regular path in either general or vocational education.

For students aged sixteen and over, the goals of the individualized paths are to focus on improving skills in the basic subjects of mother tongue, second language, and mathematics, and to emphasize subjects (Home Economics, Personal and Social Development, Geography of Québec and Canada, etc.) that will prepare them to take an active role in society. These paths are also designed to prepare them, by means of work/study programs, to hold jobs that do not require any specific qualifications, as for example, service station attendant, cashier, caretaker's assistant, stockroom helper, and parking attendant. In short, the goal of the individualized paths for learning is to prepare students who are sixteen years of age and over to be independent and productive members of society.

ERRATUM

Ce tableau remplace celui de la page 15.

Le tableau suivant illustre l'application progressive du nouveau cadre d'organisation et l'abolition du cadre actuel.

	1986-1987	1987-1988	1988-1989	1989-1990	1990-1991
Organisation actuelle (abolition progressive)	PC 2 PC 3 PC 4 PC 5 PL 4 PL 5 INT SUPP	PC 3 PC 4 PC 5 PL 5 SUPP	PC 4 PC 5 SUPP	PC 5	
Nouvelle organisation (introduction progressive)		DEP 1	DEP 1 DEP 2 CEP 1	DEP 1 DEP 2 CEP 1 CEP 2	DEP 1 DEP 2 CEP 1 CEP 2

PC: professionnel court
PL: professionnel long
INT: intensif
SUPP: programme supplémentaire
CEP: certificat d'études professionnelles
DEP: diplôme d'études professionnelles

1.4 Timetable for Putting the New Organizational Framework Into Effect

The timetable that has been drawn up sets 1987-1988 as the year in which the new organizational framework for students seeking a secondary school vocational diploma will be put into effect. It sets 1988-1989 as the year in which the organizational framework for students seeking a secondary school vocational certificate will be implemented. The delay in implementing the latter is mainly due to the need to revise some of the programs of study.

In 1989-1990, the two-year diploma and certificate programs will be in place. In 1990-91, with the disappearance of the locally developed short vocational courses, the organizational framework will be fully in effect.

The following chart shows the timetable for the gradual introduction of the new organizational framework and for the phasing out of the present one.

	1986-1987	1987-1988	1988-1989	1989-1990	1990-1991
Present Organization (gradual phasing out)	SV 2				
	SV 3	SV 3			
	SV 4	SV 4	SV 4		
	SV 5	SV 5	SV 5	SV 5	
	LV 4				
	LV 5	LV 5			
	INT				
	SUPP	SUPP	SUPP		
New Organization (gradual implementation)		SSVD 1	SSVD 1	SSVD 1	SSVD 1
			SSVD 2	SSVD 2	SSVD 2
			SSVC 1	SSVC 1	SSVC 1
				SSVC 2	SSVC 2

Key: SV Short Vocational; SSVC Secondary School Vocational Certificate
LV Long Vocational; SSVD Secondary School Vocational Diploma
INT Intensive Long Vocational
SUPP Supplementary Long Vocational Course

The first secondary school vocational diplomas will be awarded in June 1988 to students enrolled in 36-credit programs. Students enrolled in programs of more than 36 credits will receive their secondary school vocational diplomas the following year. The first secondary school vocational certificates will be issued in June 1990 to students who enroll in this branch in 1988.

It should be noted that the application of the organizational framework and of the requirements for obtaining a secondary school vocational diploma or certificate is not contingent upon the appearance and introduction of the new programs of study. While such synchronization would be desirable, to achieve it would entail a five-year delay in establishing the two new branches. Old programs of study, or revised versions of the old programs, will be taught in the time-frame (for 48 credits) that was originally envisaged for them, and will be replaced by new programs as these are developed and introduced.

In order to put into effect a proposal on which there is general consensus, students who receive secondary school vocational diplomas or certificates will automatically be given twenty credits in general education towards a secondary school diploma, as concrete evidence that vocational education contributes to a person's basic education.

CHAPTER 2:
The pedagogical infrastructure of vocational education

The reform of vocational education cannot be accomplished solely by putting into effect the organizational framework defined in the first chapter. In order to improve the instructional services, the pedagogical infrastructure must be adapted, particularly with regard to the programs of study, evaluation of learning, instructional materials, the geographic distribution of programs, equipment, and professional development.

2.1 Programs of Study

Currently, 258 vocational programs are offered to young people. No one questions the need for an in-depth revision to reduce their numbers, to ensure their relevance, and, in some cases, to update their obsolete content.

The programs of study will therefore be revised in order to offer students quality vocational education more closely adapted to present socio-economic realities. The goal in revising them will be to produce well-qualified individuals who are capable of performing competently and autonomously, the tasks required of them in their first jobs.

The training offered to students will be more comprehensive and more directly related to the performance of specific job functions, and will thus give them more flexibility in finding jobs, greater job mobility and an increased ability to adapt to the changing requirements of the job market.

The programs of study will be made up of a set of clearly-defined learning objectives that describe in practical terms the competencies (encompassing cognitive, psycho-motor, and affective dimensions) which students will be expected to develop by the end of their vocational education. These programs of study will be modular[1] to facilitate recognition of achievement and to cater to a diverse clientele. Curriculum guides and suggestions concerning the teaching/learning process, evaluation, and school organization will accompany each program of studies.

The above orientations concerning the program goals and design should lead to more individualized learning and more relevant and rigorous evaluation practices.

On a more practical level, the Ministère will undertake:

— to determine the specific occupations for which training will be given in the diploma branch and those for which training will be given in the certificate branch;

1 Modular describes a way of organizing programs of study.

— to complete the production cycle for new programs of study over the next five years, at an average rate of twenty-five programs per year. The first twenty-five new programs will be available by September 1987.[2] The total number of programs of study will be approximately 125 for both the diploma and certificate branches, that is, 50 % fewer than are currently offered.

The new programs will be continually updated so that they will reflect changing patterns in the workplace. While awaiting the new programs, the Ministère will sanction, as of September 1986, the use of programs that have been introduced into the system since 1983-1984 and have been labelled "Revised Version".

2.2 Evaluation of Learning

More rigorous evaluation of learning is an essential element in the reform of vocational education. An analysis of present evaluation practices in light of the orientations and evaluation approach envisaged in the new programs, clearly indicates the need to adapt evaluation procedures.

A "criterion-referenced" approach to evaluation is considered the most suitable to meet the particular requirements of vocational education. With this approach, a student's performance is not compared to the performances of other students in the group. Rather, the aim is to ascertain, according to predetermined criteria, the extent to which the student has achieved the objectives defined in the programs of study. In the future, ministerial evaluation will cover the theoretical and practical aspects of selected learning objectives from the programs of study.

It will clearly be necessary to progressively eliminate the fixed examination timetable set by the Ministère. As a result, the responsibility for administering ministerial examinations will be decentralized to the school level; as well, the Ministère will work together with school boards to guarantee the security and confidentiality of these examinations. If necessary, the Ministère will verify that directives concerning the administration of its examinations are followed.

In order to ensure the quality and uniformity of the decisions and judgements made by the schools, the Ministère will entrust school boards with the task of developing ministerial examinations following guidelines which it will determine. For this purpose, the Ministère will provide support in terms of training, production guides, ongoing advice, and supervision of the overall project.

2 These documents will be translated into English in an order of priority to be established in accordance with the needs of the anglophone community.

The Ministère reserves the right to administer its own tests directly for purposes of evaluating the system.

2.3 Instructional Materials

The Ministère will revise a considerable number of programs in the next five years. It is therefore necessary to plan for the production of instructional materials suitable for this new context, which will be significantly different from the existing one.

The Ministère plans to provide students and teachers with basic modular instructional materials when the new programs are ready to be implemented. The instructional materials developed with the support of the Ministère will cover all the objectives judged essential to teaching the programs of study. This material may include written or illustrated components such as technological explanations, activity sheets, learning activities, charts, booklets, books, as well as specialized materials, such as assembly models, simulators, computer software, and so on.

In the area of vocational education, the Ministère will continue to count on private enterprise to develop textbooks, provided that there is a sufficiently large market and sufficiently stable program content.

2.4 Geographic Distribution of Vocational Programs

It would clearly be impossible for each school board, let alone each school, to offer all the vocational programs, given the human, material, and financial resources that would be needed and the minimum number of students that would be required to make the operation feasible. The problem then is how to divide the vocational programs among the different school boards and also how to deal with the inherent problem of obliging students to travel long distances to designated centres in order to follow the programs of their choice.

The present distribution of programs was determined between 1966 and 1976. It was during this period that the trade schools and technical schools were integrated into the comprehensive schools and CEGEPS. In 1966, there were 55 trade schools and technical schools; today, there are at least 268 secondary schools and 40 CEGEPS offering one or more vocational programs. From 1977 to 1980, the secondary school system alone enrolled approximately 100 000 students a year in their vocational programs.

The situation has totally changed since then. After 1980, there was a 50 % decrease in student enrolment in vocational education. In addition, the creation of regional school boards has brought about an increase in the number of centres offering vocational education and a significant decrease in the number of students enrolled in each one. The result is that presently there is too widespread a distribution of programs in the province. For example, the seven long-vocational programs of study in the forestry sector were given in 1985-1986 to 467 students in fifteen schools. Another example concerns the beauty care sector, with nine programs of study being offered in 89 schools to 5 365 students, an average of 60 students per school.

In addition to these concerns, there is the question of the in-depth revision of the programs of study, which entails implementation costs (professional development, modernization of workshops, and the purchase of materials) that will be high and closely linked to the new distribution of programs.

Confronted with the problem of ensuring availability, financial feasibility, and quality, the Ministère foresees a new distribution of programs based on the following principles:

— the program distribution map should take into account the existing situation and should be the fruit of a cooperative effort by all the school boards in each of the regions;

— the Ministère should provide provincial leadership which will take regional differences into consideration and ensure development of a coherent map;

— the circumstances specific to outlying regions and to institutions serving English-speaking students should be taken into account;

— the new distribution should be worked out according to the rhythm of implementation of the new vocational programs.

Finally, the Ministère will adjust the formula for allocating financial resources to take account of the decisions made with regard to program distribution. Financial resources for implementing the new programs (professional development, purchase of equipment, and piloting) will be allocated in keeping with the new program distribution.

2.5 Equipment

Despite the efforts to modernize that have been made over the years, a great deal remains to be done. An inventory of existing equipment by sector of vocational education indicates that 50 % of it is at least ten years old and 23 % of it is between six and ten years old. This inventory also reveals the considerable discrepancies in the quantity

and quality of equipment available in different school boards for any given program of study.

To ensure the general quality of instruction, it is necessary that all schools offering the same program have comparable equipment available for use. However, the Ministère has only a limited budget of specific funds which it must allocate as effectively as possible. Given the current distribution of vocational programs, it is often impossible to ensure that all schools receive the funds they need to be able to offer quality instruction.

As pointed out earlier, the specific budgetary allocations for furniture and equipment (mobilier, appareillage, outillage), must be tied to the cost of implementing each of the programs and to the rational distribution of these programs.

Finally, the ministère de la Main d'oeuvre et de la Sécurité du revenu will be approached with a view to proposing an arrangement that would ensure more rational use of the equipment acquired for adult education by making it available, insofar as possible, to young people in vocational education.

2.6 Professional Development

Technological developments and the requirements of the job market have made it necessary to modernize the equipment available and to undertake a major revision of the programs of study. These actions will not achieve the desired goals unless they are accompanied by professional development programs for teachers.

Only recently have vocational education teachers been offered programs for updating their technical knowledge and skills. Consequently, there is still a great need for professional development. It should also be anticipated that additional needs for professional development will be created by the present revision of the programs of study and methods of evaluation.

Given the extent of these needs, it can be seen that while local professional development activities may meet certain specific needs, they cannot constitute a basis for systematic professional development for vocational education teachers. It is therefore the intention of the Ministère to establish professional development programs designed to facilitate implementation of the new programs of study. These professional development programs could focus on updating teachers' technical and technological knowledge, on the new content of the programs of study, on the new methods of evaluation, and on the new teaching/learning approach.

The Ministère also considers that professional development sessions in industry are essential to maintain teachers' level of competence, especially in sectors that are experiencing continual and rapid technological change.

The implementation of the plan for reforming vocational education will significantly increase students' motivation to enter this sector. The transition phase required for implementing these reforms would provide an excellent opportunity for those teachers who are still on surplus to participate in professional development activities.

CHAPTER 3

Coordination of vocational education

Coordination between the educational community and industry and between the different levels and types of institutions offering vocational education will make it possible for the concepts of availability of education and continuing education to become concrete and practical realities. It will also make it possible to better define the position of secondary school vocational education within the overall context.

3.1 Relations Between the Educational Community and Industry

Relations between the educational community and industry already exist at the local and regional levels, as demonstrated in the successful vocational education projects that have already been carried out by certain business establishments and educational institutions.

There are many advantages to establishing closer ties with industry: schools are better able to understand the qualitative and quantitative needs of the workplace and to adapt continually and rapidly to meet these changing needs; schools can use the resources of industry for the education of their students and the professional development of teachers; schools can better match their vocational education program with current technological requirements. Close ties also make it possible for industry to establish fruitful contacts with the schools and to communicate its expectations more effectively.

It is therefore important to reaffirm the key role played by school boards and schools in tightening relations between the educational community and industry.

Relations between the educational community and industry, albeit of a different nature, also exist at the level of the Ministère. In order to improve the quality of vocational education, it is necessary to maintain close and functional relations with the workplace, particularly in the development of suitable programs of study and in the evaluation of learning. Representatives of industry will thus be formally involved at one or more stages of this developmental process.

The ministère de l'Éducation also intends to redefine its relations with the ministère de la Main d'oeuvre et de la Sécurité du revenu, which is an important partner involved in the workplace and in the education of the work force.

3.2 Coordination of Vocational Education for Young People and Adult Education

As part of the coordination efforts needed to ensure coherence in educational practices, continuity in the education offered, and the most economical use of available resources, the Ministère will give

priority to an integrated system of program development and certification.

The initial vocational education offered to young people and adults will lead to either a secondary school vocational diploma or a secondary school vocational certificate. Complementary education will be offered to adults for retraining and upgrading and will lead to attestations of studies. Specializations will be available primarily to adults but also to young people, and will lead to a certificate of specialization.

3.3 Coordination of Vocational Education at the Secondary School and CEGEP Levels

Aware of the problems of coordination between the CEGEP and secondary school levels, the Minister of the ministère de l'Éducation and the ministère de l'Enseignement supérieur et de la Science formed a working committee whose mandate is to determine which level of education will be responsible for which occupations and responsible for developing and offering the appropriate programs. This committee is to submit its recommendations in October 1986 and will then continue its work on other problems, notably that of ensuring continuity in vocational education.

3.4 Coordination With Private Educational Institutions

The problems involved in ensuring the quality and pertinence of vocational education which have been identified in the public school system also affect private educational institutions. They too are governed by the same regulations and must use the same programs of study as the public schools, whether or not they are subsidized (with the exception of some schools which offer programs not available in the public school system). The success of the approach favoured by the Ministère is dependent upon positive results of the actions proposed in this document as well as on greater involvement of private schools in these initiatives.

To this end, the Ministère is committed to providing private institutions with all the information they need to be able to comply with the regulations, follow the new programs of study, and work within the new organizational framework so that ultimately students will draw maximum benefit from the reform of vocational education.

CHAPTER 4

General education courses with technical content

Although this chapter is concerned with general education, it nevertheless completes the framework for a policy on vocational education for a number of reasons. First, some of the general education courses duplicate some of the content, methods, procedures, and skills of the vocational education courses, but for purposes of attaining general education objectives. They also necessitate the use of workshops, tools, and materials, and frequently involve vocational education teachers. They are important because their impact in the schools may foster a positive perception of vocational education in the eyes of students, teachers, and parents alike.

The general education courses with technical content include complementary courses, technical exploration courses, manual and technical education courses, technological education courses, and the Introduction to Technology course. This chapter deals only with actions concerning the range of optional courses in the timetable of secondary school students.

Secondary II and III technical exploration courses will gradually be phased out as manual and technical education courses and the two new vocational education branches are phased in. The Ministère intends to retain the complementary courses, recognizing, however, that it will be necessary to give them new orientations and revise the programs of study.

The Ministère will provide support for the implementation of manual and technical education courses offered to students in individualized paths for learning in the first cycle of secondary school. Among other support measures, it will follow up on a professional development program whose goal is to enable teachers to master the technical and technological aspects of the program and to develop instructional methods designed to facilitate the integration of mother tongue and mathematics programs into manual and technical activities. More than 100 teachers are already taking part in this program and should finish in July 1986.

The Ministère will approve manual and technical education (MTE) programs and make them available to the schools according to the following timetable: MTE-1 in September 1987; MTE-2 in September 1988, and MTE-3 in September 1989. This schedule will make it possible to modify the programs and to develop the necessary related materials.

The Ministère will also give official approval to the four technological education programs by September 1987 and make them available to all school boards. No specific financial allocations will be made for equipment, but the Ministère is willing to assume responsibility for the logistics of organizing professional development sessions and for the cost of resource persons.

CONCLUSION

This plan of action alone cannot establish the worth, or ensure the *quality*, of vocational education. All those involved, school commissioners, directors general, directors of instructional services, coordinators, consultants, school principals, parents, and teachers will have to do their part.

After consulting the key people involved and analyzing the results of these exchanges, the Minister of Education intends to present, early in the fall, its plan of action and the *Regulation Respecting the Basis of Vocational Education Organization* to the Conseil supérieur de l'éducation and subsequently to the Conseil des ministres, and then to integrate pertinent elements of the proposed reform into the 1987-88 *Instruction sur l'organisation des activités éducatives*. Every effort will be made to see to it that the *Instruction* is submitted to the school boards by December 1986.

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